

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1.-23. (Canceled).

24. (New) An apparatus configured to assist in regeneration of a liver of a patient by providing oxygenated blood to the liver, the apparatus comprising:

    a first catheter configured to be fluidly coupled with a femoral artery of the patient;  
    a second catheter configured to be fluidly coupled with a portal vein of the patient; and  
    an extracorporeal circuit fluidly connected between the first catheter and the second catheter such that arterial blood may flow into the first catheter, pass through the extracorporeal circuit and return to the patient through the second catheter, the extracorporeal circuit including:  
        an oxygenation device configured to be fluidly connected to a source of oxygen and to provide oxygen to blood flowing through the extracorporeal circuit; and  
        a control device configured to measure a hematocrit and a partial pressure of molecular oxygen in the blood flowing through the extracorporeal circuit and to provide feedback control to regulate a quantity of oxygen being provided to the oxygenation device.

25. (New) The apparatus of claim 24, further comprising a coil heater configured to maintain a temperature of blood flowing through the extracorporeal circuit.

26. (New) The apparatus of claim 24, further comprising a device configured to provide anticoagulants to the blood flowing through the extracorporeal circuit.

27. (New) The apparatus of claim 24, further comprising a hemofiltration device configured to remove water from the blood flowing through the extracorporeal circuit.

28. (New) The apparatus of claim 24, further comprising a drip chamber configured to remove air bubbles from the blood flowing through the extracorporeal circuit.